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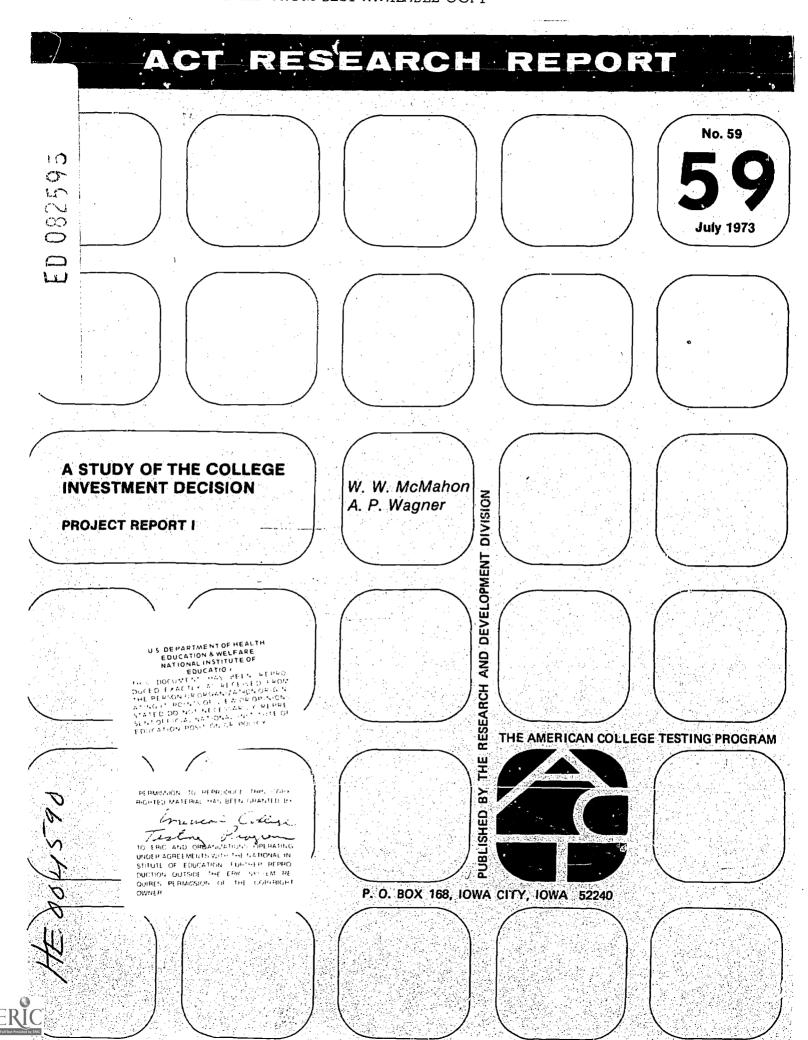
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ABSTRACT

This report provides financial aid administrators and other interested researchers with an overview and the rationale of the College Investment Decision Study while also placing it in perspective in relation to the objectives and orientations of other recent major microeconomic surveys. A brief description is given of each of the six other surveys, and key characteristics of the respondents in all surveys are compared to the relevant characteristics of the U.S. population as given by the U.S. Census data. Comparisons are presented for family income, race, parents educational level, sex, and type of institution attended. (Author)



A STUDY OF THE COLLEGE INVESTMENT DECISION

Project Report I

Responses, with Comparisons to the Characteristics of Other Recent Microeconomic Surveys

Walter W. McMahon and Alan P. Wagner



Prepared by the Research and Development Division

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ABSTRACT

This is an initial report on the USOE-ACT College Investment Decision Study. It reports on 2,693 students and their families who were contacted in 1972 in Stage I of the survey. Copies of the questionnaire and the Family Financial Statement used in the study are presented in Appendices A and B.

The purpose of this report is to provide financial aid administrators and other interested researchers with an overview and the rationale of the College Investment Decision Study, while also placing it in perspective in relation to the objectives and orientations of other recent major microeconomic surveys. A brief description also is given of each of the six other surveys, and key characteristics of the respondents in all surveys are compared to the relevant characteristics of the U.S. population as given by U.S. Census data. Comparisons are presented for family income, race, parents' educational level, sex, and type of institution attended.

Future reports and articles will be concerned with the respondents in Stage II and with analyses of the data collected in the College Investment Decision Study, using economic models of family college investment decisions. However, marginal frequency distributions are presented in Appendix C of this report which give the responses of the sophomore, junior, and senior respondents in Stage I to questions about their expected earnings, aspirations, expenses at college, family income and assets, and 1972-73 college choice.

A STUDY OF THE COLLEGE INVESTMENT DECISION

Project Report I

Walter W. McMahon and Alan P. Wagner¹

The decision to invest in higher education is heavily influenced by economic and social factors within the family. The household (including the student member) normally expects both nonmonetary returns and increased future earnings through its investment in higher education. When these returns are weighed in relation to the costs of tuition, fees, books, room, board, and the additional costs of the student's time (the latter based on earnings foregone while in school), the student and his or her family have a rational economic basis for calculating how much they should eventually invest. Actual investment decisions are also heavily influenced however by a set of short-run constraints, such as the family's current income, current asset holdings, and the availability of loan financing, and by the family's unique perceptions of future returns. The expected returns, as well as the short-run constraints, are affected by its past experience, race, ability, and tastes.

The serious analysis of interdependent saving and investment decisions over the family's life cycle, including the intergenerational transfer of wealth that is involved as parents support the student's investment in higher education, requires fairly complete and accurate microeconomic data. The major previous and ongoing studies which have collected enough specific information on expenditures on higher education, family income, assets, student ability, and expected returns to permit some analysis of the economics of the decision are:

- 1. Project Talent (1960), with 1-, 5-, 11-, and 20-year follow-ups;
- 2. The Growth Study (1961), with a 1968 follow-up;
- 3. The SCOPE Study (1966), with 1967-71 follow-
- 4. The PSAT Study (1966), with a 1969 follow-up;
- 5. The Thorndike-NBER Panel (1955), with a 1968 follow-up, and
- 6. The National Longitudinal Study, High School Class of 1972 (USOE-ETS), with a prospective 1973-74 follow-up.

Most of these studies were not designed primarily to gather economic data. The strengths of each derive from the different populations surveyed and the differences in the types of information collected. Many were originally designed for the study of student aspirations, student psychology, and for assistance in the development of educational and training programs, rather than primarily for economic analysis of the behavior underlying college investment aecisions. Hence they did not obtain complete data on college expenditures, income and assets as reported by parents, and financial aid offers. In addition, test scores, race, or other background items were not always available. Thus, a need for a survey which would be oriented to the economic aspects of the college investment decision became apparent, and to meet this need the College Investment Decision Survey was undertaken.

Part I of this paper briefly describes the sample design of the College Investment Decision Survey and of each of the other six surveys listed above. Part II compares income as reported by the parents in all surveys (where available) to Census data, since this information is of particular importance to economic analysis of the short-term dynamic aspect of the decisions to invest in higher education. Part III compares some of the other characteristics of respondents, such as (a) race, (b) parents' education, (c) sex, and (d) type of institution attended. Appendix C is preceded by a table of contents which lists the additional responses reported there.



^{&#}x27;The authors are Associate Professor of Economics, University of Itlinois (ano Guest Scholar, The Brookings Institution), and graduate student in Economics at the University of Illinois, respectively. They have shared equally in the preparation of this manuscript. The College Investment Decision Study was made possible by support from the U.S. Office of Education, the cooperation of The American College Testing Program, and by assistance from the Spencer Foundation. Mel D. Orwig, Minnesota Board of Higher Education, participated with the authors in the design and implementation of the survey, as did James Maxey and Mars Perti of The American College Testing Program. The authors also wish to thank Robert H. Berls, U.S.O.E., who made suggestions useful in the preparation of this report.

I. The Major Surveys

A brief description of each national survey which contains enough economic data to permit an analysis of the economic decisions of households must precede comparisons of the main characteristics of the respondents. The College Investment Decision Study will be described first, and in more detail, since material relating to it has not been published elsewhere.

The College Investment Decision Study

Data needed for implementation of a life cycle microeconomic model of decisions to invest in higher education were collected from a sample of 3,516 continuing college students in the spring and summer of 1972 and from a second sample of 3,503 entering freshmen or young adults who decided not to attend college in the fall of 1972 (The American College Testing Program, 1972). To obtain information from the student about his or her expenditures, sources of financial support, and both the monetary and nonmonetary returns he or she expects from his or her college education, the questionnaire shown in Appendix A was sent to the student. The student was not relied upon to report his or her parents' income and assets, but instead more complete and accurate data were obtained directly from parents who filled out the ACT Family Financial Statement (FFS) shown in Appendix B.

English, mathematics, social studies, natural sciences, and comprehensivetest scores measuring the student's analytical and problem-solving abilities were taken from the ACT Assessment. The Student Profile Section (SPS), which the student completed when he or she took the ACT Assessment before entering college, was used as the source of additional information on race and reasons for attending college. Finally, institutional data about the type and quality of the school that the student chose to attend (if he or she did go on) came from the American Council on Education Institutional File (1969).

In order to secure a complete data record for each family, the sample was selected from the population of all students requesting ACT to analyze their financial need. To be eligible for inclusion in the ACT sample, the student (family) must have—

- 1. filed a complete FFS,
- 2. taken the ACT Assessment, and
- 3, answered the SPS race identification question.

Comparisons later to Census data examine the effects of excluding families who did not apply for financial aid using the FFS, or in other ways did not meet the above criteria. There may be some bias introduced by excluding those families who refused to answer the race question; but this bias must be weighed against the advantage of having a sufficient number of blacks and other minorities in the final sample to permit a meaningful analysis of investment by each group. There are additional appraisals of the bias, if any, introduced in this or other ways. Overall, the sample selected appears to be reasonably representative, however. To the extent that it is not fully representative, there is a counterbalancing advantage secured by obtaining very complete information about that set of lower middle income families that are most directly affected by current financial aid policies.

The sample design called for systematic sampling within designated racial strata since the educational investment behavior of particular subgroups is of special interest. For the sample of potential sophomores, juniors, and seniors in Stage I every second white, every black, and every second "other" minority group member were chosen from those who filed in the center of the filing period² by a randomizing rolling survey technique that is explained below. As a result, corrections can be made by subsampling or weighting blacks who are over-represented in the sample before they are merged and conclusions drawn that apply to all families requesting analysis of their financial need.³

It should be kept in mind that the resulting College Investment Decision families constitute a stratified random sample of families applying to ACT for need analysis and not a national probability sample since the sample was not drawn from the entire population of U.S. families. Nevertheless when the College Investment Decision sample is compared with nationally representative samples of families, the Census, and with the national student norms provided by the American Council on



It was desirable to keep the sample approximately centered on the December 1971 through August 1972 filing period. A late start led to heavier sampling ratios in the middle of the period to avoid the very early and very late applicants.

³See Kish (1965), pp. 77, 85.

⁴The potential self-selection bias in drawing from a population of those students applying for financial aid is also appraised in this paper through the comparisons with Census and BLS data.

Education (see Parts II and III of this paper), implicit or explicit probability weights can be assigned as correction factors to each element in the sample corresponding to its frequency in these national populations.

For the 1972 spring-summer Stage ! involving potential 1972-73 sophomores, juniors, and seniors, the sampling was conducted through a rolling mail survey. Every two weeks, questionnaires were sent to a stratified random sample of potential upper classmen after their Family Financial Statements had been filed, the need analysis computed, and the schools notified. There were two follow-ups to nonrespondents. In addition, a one-page supplement to the questionnaire was mailed to students who had returned the form with incomplete financial data, adding about 16% to the usable responses. The result was a 78.7% response rate. Since many of the key characteristics of the nonrespondents are known and the response rate is unusually good, subsampling of the nonrespondents did not appear to be necessary or useful.

The 1972 Stage II of the survey waited to allow potential freshmen to make their enrollment decisions. The respondents were contacted in early November 1972 and asked to provide estimates of first semester expenses if they had in fact enrolled. All were asked to report the financial aid offers they had received from first-, second-, and third-choice institutions. The response rate for the fall 1972 sample was 74%. Because the questionnaire was sent to the home (parents') address with directions that it be forwarded to the son or daughter, the data collection process took longer but did obtain information from those who chose not to attend.

All respondents were clearly informed that their participation was voluntary and unrelated to any financial aid decisions. For those in Stage I, the need analysis had been performed and the information mailed to the school where aid decisions were made before the student was eligible to be selected by the sampling procedure and to be sent a questionnaire. Students in Stage II had either received or failed to receive financial aid, and the college investment decision had been made before they were selected or contacted.

Project Talent and Follow-ups

Project Talent is a continuing 20-year longitudinal study of 1960 high school students, generating information about their educational and vocational development. Freshmen through senior classes were surveyed nationally in 1960. Each class

has been and will continue to be reinterviewed after 1-year, 5-year, 11-year, and 20-year intervals.

The high school was the sampling unit for the study. Differential sampling ratios were employed to insure adequate cell size for statistical analysis. Stratification of high schools was done by—

- 1. type (public, private, parochial);
- 2. geographic size (56 size strata);
- 3. size of senior class (range from under 35 to over 400); and
- 4. dropout rate.

Population weights were then assigned to each sample element corresponding to its frequency in the population sampled.⁵

Within each high school, students were questioned in the following areas:

- 1. specific abilities and aptitudes, measured by responses on a series of tests;
- 2. student interests, to provide a comparison to future vocational and educational choices;
- 3. student activities, indexing temperament and personality; and
- 4. student information, collecting responses to questions about high school grades, family size, and expected income. A "socioeconomic index" was constructed from student estimates of family income, home value, stock of household durables, and parents' occupation and education.

On a separate questionnaire, high school administrators provided information about school expenditures, faculty, and counseling facilities.⁶

Follow-ups to the 1960 survey at the 1-,5-, and 11-year intervals (e.g., the 1-year follow-up of 12th graders was in 1961, and the 11-year follow-up of this group in 1971 has just been completed) have collected information about college or employment experiences. Neither the original survey nor the follow-up after the family had made the decision about college contacted the parents to obtain information about their income, debts, and assets. Information was obtained from the student about his of her expenditures while at college, grades, and



⁵A more extensive discussion of the sample design may be found in Rose et al. (1972), pp. 303-305.

^{*}All instruments are reproduced in the American Institutes for Research (1972).

salaries earned after he or st.e accepted employment. Nonrespondents were subsampled to permit correction for nonresponse bias.

The Growth Study ETS and 1968 Follow-up

The original 1961 sample of high schools was selected on the basis of—

- 1. geographic location,
- 2. size of school system (all sizes represented), and
- 3. rate of college attendance (all rates represented).

Students received questionnaires that inquired about their—

- 1. abilities and aptitudes, as measured by several test scores; and
- 2. family backgrounds. The students reported their parents' education and occupations, such things as the number of bathrooms in their home, and their life style.

School and community environment information was provided both by students and by school administrators. The survey of 11th graders from 1961 to 1969 was accompanied by only one study of post-high school activities. It was done in 1968 when 1967 Growth Study high school graduates were recontacted. Their responses to questions about post-high school activities were coupled with earlier test and family data for comparison with Project Talent respondents 7 years earlier.

The SCOPE Study and 1967-71 Follow-ups

A cross-section and longitudinal survey of 56,061 9th graders and 40,986 12th graders in 1966, SCOPE was designed to provide information about how post-high school decisions were reached. Clusters of students (defined by criteria described below) were examined in each of the 6 years of the study with follow-ups extending to 1971. California, Illinois, Massachusetts, and North Carolina were the four states selected for the study, providing a variety of geographic, public high school, and higher education system differences.

Within each state the sample was stratified by counties on the basis of—

- 1. county median income,
- 2. county white collar percentage,

- 3. cc hty racial composition,
- 4. county mobility,
- 5. county rate of high school attendance,
- 6. county rate of college attendance, and
- 7. school size.

Secondary and tertiary stratifications were by school districts and then by schools,⁹ followed by random sampling within each strata.

The original survey provides information on—

- 1. school aptitude, as measured by AAT test scores:
- educational opportunity, an index based on the size of the community, size of the school, studentcounselor ratio, expenditure per student, and rate of college attendance; and
- 3. family status, based on student reports of parents' education, parents' occupations, and family size.

Of particular interest is the 1967 follow-up survey of 1966 12th graders. The survey contained information on race, college attendance, type of institution, and the parents' reporting of income. While the SCOPE research staff acknowledges that this follow-up was not nationally representative of all post-high school young adults, 10 the financial information gathered from the parents is more reliable and accurate than are the student estimates in the original survey. This 1967 SCOPE follow-up is considerably more useful for purposes of meaningful economic analysis.

The PSAT Follow-up Study

The PSAT follow-up study conducted by Haven and Horch at Educational Testing Service, Princeton, New Jersey, was designed to examine how families finance a year of postsecondary education. The population sampled consisted of students in college in the 1968 fall term who had participated in an earlier PSAT norming study as high school juniors in 1966. Questionnaires were



^{&#}x27;See Rose et al. (1972), pp. 132-34.

^{*}See Rose et al. (1972), p. 139.

See Center for Research in Higher Education (1965), p. 26.

¹⁰Ibid., p. 28.

sent to the students in July 1970, requesting information on—

- 1. personal and family characteristics, including sex, race, marital status, family size, and their estimate of family income;
- 2. academic aspirations and abilities, provided by responses to questions on degree objectives and college grades; and
- 3. detailed budget expense data, including sources of financing.

No data were collected from parents on their income and assets. Additional information was collected on each student's achievement test score (PSAT) and on the standardized college budget at the institution attended as estimated by college financial aid administrators.

The Thorndike-NBER Follow-up

Following World War II, Professor Robert Thorndike at Teachers College, Columbia University, collected data on a group of men for whom Army General Classification Test scores were on record. The National Bureau of Economic Research followed up this group, collecting data on their 1968 incomes, hours worked, occupations, colleges attended, 'ctivities, and attitudes. Of the 8,000 receiving questionnaires 5,100 responded, which represents a response rate of 64%. Data were added to the file from other sources relating to the quality of the institution attended.

In the original Thorndike survey 25 years earlier, data were not collected on the size of the investment

expenditure made by the 75% who either attended college, graduated, or received some graduate training. It also did not cover family income or veterans benefits. So although the survey provides a poor basis for studying factors entering into the investment decision, it is one of the best sources for study of longer term returns to the investment in education.

The National Longitudinal Study of the High School Class of 1972

In April 1972, 20,000 12th grade students in approximately 1,200 high schools filled out questionnaires. This information was supplemented by a questionnaire filled out by a counselor at each school which supplied information from school records and about guidance activities. A follow-up study is planned for the fall of 1973. The survey is conducted for the U.S. Office of Education by the Educational Testing Service.

Eighteen students in each high school that participated answered questions about their—

- 1. aspirations,
- 2. plans, and
- 3. previous experiences;
- 4. achievement test scores also were obtained.

No data on income or assets were obtained from the parents. The fall 1973 follow-up will determine the college attended (if any) and the student's approximate expenditure. However, it will not obtain financial aid offers and characteristics of other institutions considered by the student.

II. Comparisons of Incomes of Respondents

The distribution of the personal income of families in each of the recent higher education surveys is compared with (a) data from the 1970-71 Census, (b) data from other recent surveys, (c) data from the BLS Consumer Expenditures Survey, and (d) the American Council on Education national norms on entering freshmen. These distributions are reported in Table 1.

Personal income before taxes and including transfer payments was used wherever possible because it was closest to "adjusted gross income" which parents can be (and, in the College Investment Decision Study, were) asked to copy

from a specific line on their personal income tax form. Students' estimates of their parents' income tended to be based on lack of information as may be seen from Table 2. Consequently, unless the parents were approached directly, Table 1 indicates that income data were not collected. The income brackets for the 1971 Census distribution and for surveys conducted before 1972 were adjusted to a 1971 calendar year basis insofar as possible by use of the Consumer Price Index.

The Census data in Table 1 show that families with college age children have higher incomes than do all U.S. families. Those families with children in



TABLE 1

Family Income of Families Included in Recent Higher Education Surveys (Percent of Families)

		Census				Recent	Major High	Recent Major Higher Education Surveys	Surveys		
Fersonal ^a income (1971 dollars)	All Census families (1970)	Censular familities with col- lege-age children (age 18-24)	Census families with en- rolled children	College Investment Decision (USOE-ACT,	Project Talent, 1-year follow-up of 12th graders	Growth Study, (ETS) follow-up	SCOPE (ETS) 1-year follow-up of 12th graders	PSAT Study 2-year follow-up of 1967	Thorndike- NBER panel (1968 follow-up)	National Longl. study (USOE-ETS) 12th graders	BLS-urban families with col- lege-age children
	(1) 1971		(3) 1971	(4) 1972	(5) 1961	(6) 1968	(7) 1967	(8) 1969	(9) 1955	(10) 1972	(11) 1960-1 ^b
Under \$3,000	8.8%	7.3%	2.7%	8.3%	not .	not	4.0%	not	not	not	4.0%
\$3,000- 4,999	11.8%	9.0%	5.0%	11.4%	-loo	-100	2.5%	-100	-100	-100	7.7%
\$5,000- 7,499	16.1%	12.9%	%9.6	16.6%	lected.	lected*	7.3%.	lected*	lected	lected*	15.9%
\$7,500- 9,999	16.1%	14.2%	12.3%	18.3%		_	10.6%		(in		19.3%
\$10,000- 14,999	22.9%	24.1%	25.9%	25.0%	-		24.8%		1955)*		32.6%
\$15,000 and over	17.4%	25.2%	37.4%	13.5%			46.0%			J.	20.5%
No response	e 6.9%	7.3%	7.1%	6.9%			4.8%				0
Total	100.0%	100.0%	100.0%	100.0%			100.0%				109.0%
Total	50,968,827	9,645,000	3,692,000	2,384			6,633	3,363	5,100		1,425

""Not collected" means that income data were not collected from the parents (who have the necessary accurate information). However, SES indices have often been constructed from student responses about their parents' income, occupations. education, and in some cases special studies may have gone back later with inquiries to some of the parents. ^aThe standard concept of personal income (before taxes and including transfers) is used whenever possible and unless ^bFor surveys not collecting data on 1971 incomes, incomes are converted to 1971 levels by use of the consumer price index. indicated to the contrary. The BLS column uses disposable personal income.

C. Flanagan and W. W. Cooley (1966); Col. 6. T. L. Hilton and C. P. Bower (1970); Col. 7: Center for Research in Higher Education Sources of Data: Cols. 1-3; U.S. Bureau of the Census (1972a); Col. 4: The American College Testing Program (1972); Col. 5: J. (1967); Col. 8: E. W. Haven and D. W. Horch (1972); Col. 9: National Bureau of Economic Research (1972); Col. 10: Educational Testing Service (1972); Col. 11: U.S. Bureau of Labor Statistics (1960-61).



TABLE 2
Student Response: Family Income (College Investment Decision Survey)

	Student	Distribution of no response
Less than \$3,000	7	7.0%
\$ 3,000-5,999		27.9
6,000-7,499		19.1
7,500-8,999	6.7%	15.4
9,000-11,999		19.5
12,000-14,999	ĺ	8.2
15,000-19,999	-	2.5
20.000 and over		.4
consider this		
confidential	2.7	
i don't know	25.0	
No response	65.6	
Fotal	100.0%	100.0%

^aDistributed by parent-reported income.

college have still higher incomes, with a much heavier concentration in the \$15,000 and over income bracket, and with less than half the proportion of families in the \$5,000 and under income bracket than one finds in the population as a whole.

In relation to this, the College Investment Decision Study has a distribution of incomes that is remarkably close to the distribution of family incomes in the entire U.S. population. This may be seen by comparing Columns 1 and 4 in Table 1. The incomes of the survey group are slightly lower, however, than those of the entire population with children enrolled. From another point of view the data are best for the study of that part of the population most affected by financial aid policies.

The SCOPE panel, in sharp contrast, is heavily concentrated in the \$15,000 and over income brackets. The National Longitudinal Study did not collect income data from parents; and the 65.28% of the students who did respond to this question probably reflects the fact that few entering freshmen know their parents' income or know about the parents' financial asset holdings. When students included in the College Investment Decision Study survey were asked to report their parents' income when taking the ACT Assessment, a very high percentage did not respond to the question or answered "I don't know" when this was offered as an option. The question asked was:

To plan financial aid programs for entering students, colleges need to know the financial background of their students. Please estimate as accurately as possible your family's income. (Indicate total income before taxes.)

The 65.6% who did not respond have pasents who are largely in the \$3,000-7,500 income range, as indicated by the income reported independently by their parents.

III. Comparison of Respondents' Characteristics

In addition to income comparisons, similar comparisons follow for race, parents' education, sex, and type of institution.

Race

The racial composition of all Census families and of families in those surveys for which the data on race could be obtained is shown in Table 3. The College Investment Decision Study deliberately oversampled blacks, doubling the number who would have been selected by purely random methods in order to have a large enough group for some separate analyses. The "weighted" column corrects for this oversampling and is the one that

should be used for comparisons. Project Talent did not collect information on race in either the original survey or the follow-up.

The Census data for 1971 reveal that black families constitute about 13.1% of all families with college-age children, and yet they represent only 7.8% of all families with children attending college. The College Investment Decision Study, when corrected for oversampling, and the National Longitudinal Study have proportions of blacks about equal to those found in the total population of families with college-age children. Other nonwhites are somewhat over-represented in both, but there would appear to be a large enough number of nonwhites in both surveys that a meaningful analysis should be possible.



TABLE 3

Comparison of Race in Recent Postsecondary Education Surveys

				Percer	ntage of Fam	ilies			
Race	All Census families	Census families with college-age	Census families with enrolled	Inves	lege tment sion ^a	PSAT follow- up ^b	Project Talent	National Long'i. Study ^C	ACE freshman norms percent
	(1970) (1)	children (2)	children (3)	Weighted (4a)	Raw data (4b)	(1969) (5)	(1961) (6)	(HS 1972) (7)	students (1971) (8)
White	89.3%	85.8%	90.5%	76%	(67)	91%	n.a.	(72%)	91.4%
Black	9.7	13,1	7.8	13	(23)	5		(16)	6.3
Other	.9	1.2	1.6	11	(10)	4		(10)	2.3
Total %	100%	100%	100%	100%	100	100%		100%	100%
, n	52,696,000	9,645,000	3,692,000	2,384	(2.693)	3,363		(7, 93 3)	171,509

^aThe raw data reflect the deliberate oversampling of blacks requiring weighting to correspond with the ACT family population from which the sample was drawn. This was accomplished by reducing the representation of blacks by one-half.

Sources of data: Cols. 1-3: U.S. Bureau of the Census (1972b), Table 13; Col. 4: The American College Testing Program (1972); Col. 5: E. W. Haven and D. W. Horch (1972), Table 2; Col. 6: Project Talent survey did not collect information on race; Col. 7: ETS, NLS HSC (1972), preliminary results; Col. 8: American Council on Education (1971), Table VII A-3.

Parents' Education

The parents' education can be expected to have a demonstrative effect on the child's educational attainment (at least as long as it exceeds the level attained by the child) as well as to contribute to the family's earnings.

The educational level of the parents in the College Investment Decision Study, as may be seen in Table 4, is below that of parents of all enrolled students as given either by the Census or by the ACE freshman norms. This result is to be expected, since households in the College Investment Decision Study are applicants for financial aid. Only about 13% of the fathers of these aid applicants are college graduates.

An even larger proportion of the parents of the 9th graders in the SCOPE study had not completed high school. These 9th graders would be college juniors in 1972-73. A remarkably large proportion of the students in the National Longitudinal Study did not

answer the part of the question about their parents' education, but in other respects the pattern of adult education in this survey is similar to that found in the population of all Census enrolled students.

Sex

Table 5 shows the distribution of students by sex in each of the recent surveys.

The proportion of males is lower in ail of the surveys than it is in the Census or in the 1971 ACE freshman norms. The proportion of males is lowest, and of females the highest, in the College Investment Decision Study. It is possible that girls are more likely to cooperate with all studies by returning the questionnaire. SCOPE was designed to select equal numbers of each sex, but this survey also would require weighting if it were to be representative of the larger proportion of males in the college-going population.



bin the PSAT study, 24 subjects did not report race.

^cn = 7,933 in preliminary tabulations out of the 18,119 surveyed.

TABLE 4

Comparison of Parents' Education Level in Recent Post-High School Activity Surveys

					Percentage	of Students			
Parents' Education Level		Census of all students enrolled in	_	nvestment n (1972)	Project Talent follow-up	Growth Study ^b follow-up	SCOPE 9th graders	National Long'l. Study	ACE freshman
		college^a (1971)	Father	Mother	(1961) Father	(1968) Father	(1966) Father	(1972) Father	(1971) Father
Up through 8 years		11.8%	23.6%	14.4%		5.6%	17.4%	1 (44 000)	8.8%
9-11 years		11.8	12.4	12.7		18.3	18.2	(11.9%)	15.8
12 years		35.5	32.5	41.4		27.4	28.6	(11.3)	30.9
13-15 years		15.3	17.9	23.0		13.0	15.6	(6.8)	16.9
16 years	1	25.5	6.5	5.8		12.8	13.0	(3.6)	18.4
17 or more ^C years		25.5	7.1	2.7		7.6	7.1	(3.2)	9.3
No response						15.3		(63.2)	
Total %		100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%
n		5,096,000	2,384	2,384			35,734	18,119	171,509

^aEducation of head of families of 18- to 24-year-old enrolled students. The 18-24 age range comprises 84.28% of the College-going population, full time and part time.

Sources of data: Col. 1: U.S. Bureau of the Census (1972b), Table 12; Cols. 2-3: The American College Testing Program (1972); Col. 5: T. L. Hilton and C. P. Bower, 1970; Col. 6: Center for Research in Higher Education (1966); Col. 7: ETS, NLS HSC (1972), preliminary results; Col. 8: American Council on Education (1971), Table VII A-3.

Type of Institution

The Census data in Table 6 show that in the 1971-72 academic year 79.2% of the students were in public institutions and 20.8% were in private institutions. This result is almost identical to the proportions in the College Investment Decision Study in which 80% are in public and 19.9% are in private institutions. It was not possible to get a public-private institution breakdown for the Project Talent one-year follow-up, Growth Study, or SCOPE data because in the first two cases at least the information was not readily available on this basis.

The first wave of the National Longitudinal Study in April of 1972 contacted high school seniors before they had chosen their institutions or made final decisions, so it does not contain this type of information. The PSAT 1969 fellow-up study

reported almost three-fourths of its students in public institutions and one-fourth in private institutions, results which are very close to the 1971 ACE national freshman norms shown in the last column of Table 6. The 5-year follow-up of Project Talent 12th graders reported 36% in private institutions, which is clearly higher than the proportion in the college population taken as a whole.

The rapid growth of public junior colleges shows up clearly in the 1971 Census estimates in Table 6, where they are seen to comprise 26.2% of all students. Public junior colleges enroll an even larger percentage of freshmen—36.9% according to the ACE freshman norms. Stage I of the College Investment Decision Study excludes freshmen, so the lower 14.9% of that group in 2-year colleges is to be expected.



^bHighest education level refers to advanced degrees (MA, PhD, MD, LLB, etc.) for the SCOPE high school students, National Longitudinal Study, and ACE norms. It refers to years completed for ACT families in Column 2.

^CAll Growth Study core students, i.e., respondents in the initial stage who reappeared in all later stages of the survey.

TABLE 5

Comparison of Sex of Students in Recent Post-High School Activity Surveys

			Pe	rcent of Stude	nts ^b		
Sex of student	Census families with children ^a	College Investment Survey	Project Talent 1-year follow-up	Growth Study follow-up	SCOPE 9th graders	PSAT follow-up	ACE freshman norms
	enrolled	(1972)	(1961)	(1968)	(1966)	(1969)	(1971)
Male Female	<i>4</i> ∮,0	37.4 62.6	52.3 47.7	45.3 54.7	50.1 49.9	48.0 52.0	54.4 45.6
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0
n	6,210,000	2,384	48,265	4,032	35,734	3,363	171,509

^aFamilies with children ages 18-24 enrolled in college.

Sources of data: Col. 1: U.S. Bureau of the Census (1972b), Table 1; Col. 2: The American College Testing Program (1972); Col. 3: United States Office of Education (1968); Col. 4: T. L. Hilton and C. P. Bower, 1970; Col. 5: Center for Research in Higher Education (1966); Col. 6: E. W. Haven and D. W. Horch (1972), Table 2; Col. 7: American Council on Education (1971), Table VII A-3.

IV. Concluding Remarks

The analysis of family decisions to invest in higher education and of decisions made in response to grant and loan offers requires accurate information about the economic "constraints" faced by these families, as well as about student tastes and aspirations. The constraints are revealed when information is collected about the families' personal disposable income, financial and real assets, available credit terms, and the net tuition-price. Information about tastes and aspirations requires inclusion of some index of institutional quality and of students' expected future returns. Many studies have collected information from students useful to the design of educational offerings and relevant to the study of psychological aspects of the learning process or of aspirations about college. But the economic data have often been obtained from students, rather than from parents. This study collects the financial data directly from the parents, who, while consulting their tax records, also sign an

authorization for cross checks on its accuracy. The College Investment Decision Study seeks to meet this need for more complete economic data as a means to improved studies of family investment behavior.

The first stage of this survey, with its 78.7% response rate, was found to correspond closely with the college-going population reported in 1971 by the Census (after weighting to correct for the planned over-sampling of blacks) with respect to the type of institution chosen, race, and parents' education. It contains a larger proportion of females, and the income of the respondents is somewhat lower than that reported for all Census families with children in college. However, it is very close to the income distribution of all U.S. families and concentrates more heavily on that group whose decisions could reasonably be expected to be most affected by currently discussed alternative financial aid policies.



^bData on sex of student respondents in NLS not available at the time of writing.

TABLE 6

Type of Institution Attended
Percent of All Students Enrolled

Type of Institution	Census of all students enrolleci ^a 1971	College Investment Decision (USOE-ACT) 1972	Project Talent 1-year follew-up 1961	Growth Study follow-up (ETS)	PSAT 2-year follow-up	Project Talent 5-year follow-up 1965	ACE national freshman norms 1971
Public	79.2	80.0			73.5	62.8	75.0
University }	53.0	36.4 28.7	81.8 ^b	63.6 ^b	51.8	55.0	1 8 .7 19.4
2 Year	26.2	14.9	18.2 ^C	36.2 ^c	21.7	7.8 ^C	36.9
Private _	20.8	19.9				36.3	25.0
University } 4 Year	19.2	2.6 15.8]	26.5		5.1 16.0
2 Year	1.6	1.5					3.9
Total above	100.0%	99.9%	100.0%	99.8%	100.0%	99.1%	100.0%
Not enrolled in these types							
of institutions	4.3	6.2	23.7	32.7	17.0		3.2
n	6,889,000	2,384	47,097	4,032	3,363	31,300	171,509

^aIncludes 1971 Census undergraduate students aged 14-34.

Sources of data: Col. 1: U.S. Bureau of the Census (1972a), Table 3; Col. 2: The American College Testing Program (1972); Col. 3: U.S. Office of Education (1968); Col. 4: T. L. Hilton and C. P. Bower (1970); Col. 5: E. W. Haven and D. W. Hörch (1972), Table 2 Col. 6: A. M. Rivlin (1969), Table A-14; Col. 7: American Council on Education (1971), Table 3.

REFERENCES

The American College Testing Program. A study of the college investment decision: The ACT data. Iowa City, Iowa: Author, 1972.

American Council on Education. The institutional domain of higher education: A characteristics file for research. ACE Research Reports, Vol. 4. Washington: Author, 1969.

American Council on Education. The American freshman: National norms for fall 1971. ACE Research Reports, Vol. 6. Washington: Author, 1971.

American Institutes for Research. Project Talent data bank: A handbook. Palo Alto; Author, 1972.



^bPercentage for all 4-year institutions, public and private.

^CPercentage for all 2-year institutions, public and private.

^dThis category also includes some nonrespondents.

- Center for Research in Higher Education. SCOPE: School to college: Opportunities for postsecondary education. Research proposal submitted to the College Entrance Examination Board. Berkeley: University of California, 1965.
- Center for Research in Higher Education. SCOPE Four state profile, grade nine, 1966, California, Illinois, Massachusetts, North Carolina. Descriptive Report. New York: College Entrance Examination Board, 1966.
- Center for Research in Higher Education. SCOPE: 1967 follow-up. Berkeley: University of California, 1967.
- Educational Testing Service. Student Questionnaire.
 National Longitudinal Study of the high school class of 1972, OE form 2348. Princeton, N.J.:
 Author, 1972.
- Flanagan, J. C., & Cooley, W. W. Project Talent: One year follow-up. Pittsburgh: University of Pittsburgh, 1966.
- Haven, E. W., & Horch, D. W. How college students finance their education: A national survey of the educational interests, aspirations and finances of college sophomores 1969-70. Princeton, N.J.: Educational Testing Service, 1972.
- Hilton, T. L., & Bower, C. P. Education after high school in 1961 and 1967. Princeton, N.J.: Educational Testing Service, 1970.
- Kish, L. Survey sampling. New York: John Wiley and Sons, 1965.
- National Bureau of Economic Research. Annual Report (summarizes Thorndike-NBER studies), 1972.

- Rivlin, A. M. Toward a long-range plan for financial support of higher education. A report to the President, Assistant Secretary for Planning and Evaluation. Washington: U.S. Department of Health, Education, and Welfare, 1969.
- Rose, C., et al. An analytical review of longitudinal and related studies as they apply to the educational process: A synthesis. Vol. 2. Los Angeles: Center for the Study of Evaluation, UCLA, 1972.
- U.S. Bureau of the Census. Census of population: 1970, General population characteristics, final report, U.S. Summary. PC(1)-BI, Table 54. Washington: U.S. Government Printing Office, 1972. (a)
- U.S. Bureau of the Census. Current Population Reports. Series P-20, No. 241. "Social and economic characteristics of students: October 1971." Washington: U.S. Government Printing Office, 1972.(b)
- U.S. Bureau of the Census. Current Population Reports. Series P-20, No. 236. "Undergraduate enrollment in two-year and four-year colleges: October 1971." Washington: U.S. Government Printing Office, 1972.(c)
- U.S. Bureau of Labor Statistics. Consumer expenditures survey, 1960-61. Washington: Author, 1960-61.
- U.S. Office of Education. Request for tabulations from Project Talent. Memorandum from Office of Program Planning and Evaluation. Washington: U.S. Department of Health, Education, and Welfare, 1968.



APPENDIX A THE SURVEY QUESTIONNAIRE





Directions: We hope this questionnaire will provide you an interesting and complete overview of the investment you are making for yourself while you are in college. To be a useful study that can help all students, however, each question must be answered. Please circle the correct response for each appropriate item. If a question asks for a monetary amount, enter a 0 (zero) if it does not apply to you. Please do not leave blanks. Thank you.

			858
1.	Are you currently attending college? (Circle one.) Full time	6.	How important to you is each of the following potential benefits from your college education? (Circle one for each item.)
	Part time	1	To 2 2 20
	Not enrolled in college (Skip to Question 19.)	A.	Meeting and conversing with interesting people1 2 3 4
2Δ	What is the name of the college you are now attending?	8.	Finding a husband (wife) with good financial prospects
	to the same of the series	C.	Locating a suitable career
В.	In what state is it located?	D.	Providing volunteer civic and intellectual leadership
		E.	Nonmonetary job satisfaction
C.	Do you plan to attend this college next year? (Circle one.)	F.	Finding a husband (wife) with college-developed values
	Yes	6	Earning a good income in your chosen career 1 2 3 4
		ł	A continuing interest in reading and new ideas 1 2 3 4
3.	When you complete your formal schooling, what occupation do you	ļ	•
	plan to pursue? (Please select the occupation from the list enclosed with this Questionnaire and write the appropriate code number	1	Guiding and educating your own children
	below.)	J.	Becoming more broadminded, concerned about others, and more tolerant
4.	What is the highest academic degree that you intend to obtain? (Circle one.) None	7. BA.	Approximately how much money did your parents spend on yo for clothing and supplies (e.g., sheets, pillows, typewriter, radio etc.) from July 1971 through January 1972? \$00 Do you contribute money to your parents to help them pay bills o provide for your brothers and sisters?
5.	How important to you is each of the five following reasons for continuing your education? Although the reasons are not mutually exclusive, think carefully about the relative importance of each reason compared to the others. (Circle one for each item.) To get a better job that earns a higher income î 2 3 4	В.	Yes
	To get a better job that earns a higher income? 2 3 4		
	To enjoy greater personal satisfaction		
C.	To serve society	9.	Where do you now live while attending college? (Circle one.)
D.	To serve the next generation by more competently rearing children		With parents or relations Nonuniversity howong (not with parents or relatives) In residence hall, fraternities, or sororities
F	The guidence and advice of my payents 1 2 3 4		Other universit: housing



	ou have any brothe home)?	ers or sisters (living at	t home and/or away	В.	Books and Supplies	\$00	.00
		s			(Include the cost of books and supplies you purchased for class, plus the cost of books, records, tapes, etc.,		
If yes t	to Question 10A:				you purchased for your personal use.)		
expe	erience or plans of	OC inquire about the your brothers and sist or matrix that appear	ters. They are to	C.	Board and All Food	\$.00	\$00
	questions.				(Include cost of meals cov-		
ages in		of your brothers and in the box below and in the column.).*			ered by board job. Include meals you purchased that are not included in board charges. Married students include dependents.)		
٥	uestion 10B	Questio					
Age	Brother = 1 Sister = 2 (Circle one.)	Number of College Years Completed	Number of College Years to Go	D.	Room or Housing Costs (Include cost of rent that	\$00	\$00
	1 2				you earn through work.)		
	1 2			E.		\$00	\$00
	1 2				(Include medical insurance costs and other medical or		
	1 2	 			dental bills you paid that were not covered by insur-		
*16	1 2	hrothers and sisters	ict the information		ance.)		
	u have more than to e oldest 6.	6 brothers and sisters, I	ist (the intormetion	F	Value of Durable Goods		
omole	ted and how many	each of your brot years do you estimate	that each has to go	F.	Purchased	\$00	\$00
n colle the yea Is you	ge? (List the college ars to go in the four r college on a semes	e years completed in the state of the state	he third column and e box.)		(Include the purchase price of any durable goods lauto, cycle, TV, Hi-Fi, refrigerator, etc.) that you bought or will buy during this academic year.)		
	er			G.	Debt Repayment	\$00	\$00
	ter3				(Include the amount paid		
Are yo	u single or married?	? (Circle one.)			for installment loans (e.g., car payments) and any other loan payments you		
Single		1			have made or will make during the academic year.)		
Married Married	g (spouse <mark>not a stud</mark> d (spouse <mark>also</mark> a stud	dent)	instruction below.)	4.1	Travel Transportation		
Mar	ried Students: Inc	lude the expenses of	all your family	н.	Travel, Transportation,	.00	\$00
stud	fent, be sure to in stion 13A and boo	in Question 13. If you notude his or her tui oks and supplies expe	tion expense in		(Include travel to and from college, trips taken while at school [e.g., ski trips], transportation at college, and gas and maintenance		
attendi item, li	ing college this aca ist the expenses yo	are concerned with yidemic year. In the figure actually incurred duarter), and in the second	rst column for each luring the first term		expense. Include cost of auto or cycle insurance, and life insurance premiums.)		
your e	xpenses for the re-	st of the academic year and and third quarters THIS QUESTION	r (second semester,). Do NCT include	1.	All Other Expenses		
TANT.	PLEASE ANSWEI	R CAREFULLY REF	ERRING TO YOUR		1. New clothing purchased	\$00	\$00
eceipt	s, etc.).	i Actual Expenses	II Estimated Expenses		2. Entertainment (movies, dances, parties, etc.)	\$00	.90
		(1st Semester, 1st Trimester,	2nd Semester, 2nd Trimester, or 2nd and 3rd Quarters)		3. Laundry and dry cleaning	\$00	\$00
Tuition	<u>1</u>	\$00	\$00		4. Personal care (cosmetics, shampoo, etc.)	\$00	\$00
your of	total, as indicated in college catalogs, be ne deduction of an	g. Y_			5. Liquor, beer, Cokes, snacks	\$00	\$00
any wa	waiver. Amount on hiver received should we in Item 148.				6. All other expenses (except taxes)	\$00	\$00



4.	The following items are co			15A.	Did your parents borrow money to help you pay for your college
	used or will use to meet the Again, this question is very all you received no funds to	important so pleading the from the sources	ase answer it carefully.		Yes
	writing a \$0 (zero) in the ap	1	II		No
		Actual Expenses (1st Semester,	Estimated Expenses (2nd Semester, 2nd	3.	Approximately how much did they borrow?
		1st Trimester, or 1st Quarter)	Trimerier, or 2nd and 3rd Quarters)		\$00
A.	Parents' Contribution (Include direct payments they made for your college, expenses, any allowance you received, and any money you borrowed from your parents.)	\$00	.00	16.	On a 4.0 grade system, what is your approximate cumulative grade point average at the present time? (A = 4.0 and F = 0.0; round to nearest tenth.)
В.	Scholarship or Grant	\$00	\$		
	(Include local, state, or college scholarships or grants. Include tuition or fee waiver.)				
C.	Student Loan (Include loans from the college, the government, and banks to cover your	\$00	.00	17.	When you enrolled, or just before you enrolled in college, did either of your parents take a new or additional job to help pay for your college expenses? Yes1
	college expenses for this year. Do not include auto or similar durable goods loans,)				No2
D.	(Include value of meals earned in board job and rent earned in housing unit	\$00	.00	18.	Approximately how much money did you save from your job last summer (1971)?
	as well as cash income.)				\$00
E.	New Debt Incurred (Do not include debt listed as student loan in Question	.00	\$00		
	14C above. Include all other debt incurred [installment loans, etc.] during the academic year.)		·	19.	Using the occupation list and codes provided, complete Question 19A if you are currently enrolled. If you are not currently enrolled in college, complete Question 19B.
F.	Change in Assets	+	+ -	A.	If you dropped out of school today, what type of occupation or job would you most likely be working in?
	(From September 1, 1971, through end of the 1st semester (quarter or tri- mester) indicate the net	\$00	\$00		(Skip to Question 20.)
	change in your assets (sav- ings and/or stocks and bonds) in Column 1. In Column 11 estimate the			8.	In what occupation are you currently employed? (Code in the space below. If unemployed, circle "1" below.)
	change in your assets for the rest of the academic year. Be sure to circle the plus or minus sign indicat-				Not employed1
	ing whether your assets in- creased or decreased.)				
G.	Other Income Include income from GI Bill, Social Security, wel-	\$00	\$00		What is the amount of annual income (before taxes) you expect to earn when you complete your formal schooling?
	fare, the parents of your spouse (unless spouse is also a student), interest or dividends, or other income. Do not include borrowing or tax refunds.)				\$00 рег уезг
н.	Married Students: Income of Spouse	\$00	\$00		What is the amount of annual income (before taxes) you expect to earn 25 years from now? (Provide your best estimate lassuming no inflation) even if you are very uncertain.)
	(Include income from em-		ĺ	;	.00 per year
	ployment of spouse. It spouse is also a student, include contribution made by spouse's parents, schol-			ŧ	How certain are you that 25 years from now you will be earning the amount of income you estimated? (Circle one.)
	arship, job at school, stu- dent loan spouse incurred this year, and other income spouse received.)			 	l am very certain (probability above .75)



22.	What statement below best characterizes your opinion about the general wage level over the next 25 years in the occupation you intend to pursue? When answering this question, do not consider or include the effects of any promotions you may receive. (Circle one.)	29	What was the size of the town you grew up in? (Circle one.) Farm	2
	The average wage level will increase at about the same rate that inflation occurs in the economy		Large town (population 50,000-250,000)	5
	The average wage level will increase at a faster rate than inflation in the economy2			
	The average wage level will increase at a slower rate than inflation in the economy	30.	Since the time your parents first left school to begin work, wha statement(s) below best describes the amount of additional education that each has had? (Circle all that apply. Be sure to respond to	ŀ
23.	How many years of formal schooling has each of your parents completed? (Include elementary school, high school, and college.)		both your father and mother if you live with both.)	
	Father or Guardian Mother or Guardian		Father Mother or or Guardian Guardia	
24 .	What type of college did your parents attend? (Answer for both.) Father Mother None 1 1 Private 2 2 Public 3 3 I don't know 4 4		No structured educational experience	
25.	is your father and/or mother employed in a job that earns income? (Answer for both.)			
	Father or Guardian Mother or Guardian			
	Employed	31A.	Has any member of your family visited a doctor or been in the hospital during the last year? (Married Students: If you received support from your parents, include them as part of your family.)	e d
	•		Y	
26.	What is your father's and/or mother's occupation? (Code from the occupation list provided. If unemployed or deceased, indicate the	P.	it the blanks below please indicate your best estimate of you family's health care experience over the last year.	r
	occupation in which they were most recently employed.) Father or Guardian Mother or Guardian (Housewife code = 002)		Your Spouse Your Parents and Children Brothers, and Children Brothers, and Children Brothers, and Yourself (if married) Sisters Number of days in the hospital	
27.	What is the age of each parent, if living?		Number of visits to the doctor (omit dentists)	
	Father's Age Mother's Age		Cost of surgery (if any)	
!8 .	Approximately how many years have your parents been employed in a job that earned income? (Answer for both.)		Approximate cost of special drugs or special medical equipment	
	Father or Guardian Mother or Guardian			
	Never employed	32.	Do your parents have medical insurance on— You Themselves	
	21-30 years		Yes	

Thank you for your cooperation. It will help us to identify the true costs of college and document the need for financial aid. *Please return the questionnaire* to us in the enclosed, self-addressed, stamped envelope.



OCCUPATION CODING LIST

	ED/NO EARNED INCOME	CRAF	TSMEN, FOREMEN [continued]
	Retired		Cabinetmakers, carpenters
	Housewife	605	Compositors, typesetters
	Disabled		Cranemen, derrickmen
004	Deceased		Electricians
			Foreman, manufacturing
	SSIONAL/TECHNICAL		Foreman, nonmanufacturing
	Accountants		Linemen, servicemen
102	Architect	611	
	Artist		Machinist
	Author, editor		Masons, stonecutters
	Chemist	614	
	Clergyman		Mechanic, other
107	College professors and administrators Doctor, dentist		Metal workers
108	Doctor, dentist		Painter
	Engineer		Plasterers, cement finishers
	Engineering technician		Plumbers, pipefitters
	Lawyer or judge		Stationary engineers
	Musician		Structural metal workers
	Natural scientist		Tailors, furriers
	Pharmacist	623	Tinsmiths, coppersmiths, etc.
	Social scientist		Toolmakers, die makers
	Social/welfare workers	625	Other craftsmen
	Teachers (elementary/secondary)		
118	Technicians (medical/dental)	OPERA	ATIVES
119	Technicians (electronic)		Apprentices
120	Other professional		Assemblers
121	Other technical		Attendants, auto and parking
		704	Brakemen, switchmen
MANA	GERS, OFFICIALS, PROPRIETORS		Bus, truck', tractor drivers
201	Government officials and administrators		Filer, grinder
202	Manufacturing manager (salaried)	707	Furnacemen, smeltermen
	Proprietor (self-employed-manager)	708	Laundry and dry cleaning
	Retail manager (salaried)	709	Meat workers (except slaughter)
	Other salaried manager		Mine workers
	<u>-</u>		Power station operators
FARMI	NG		Sailors and deckhands
301	Owner operator		Sawyers, spinners, weavers
	Tenant farmer	714	Stationary firemen
303	Sharecroppers	715	Welders and flame cutters
			Other operative
CLERIC	CAL	710	Other operative
401	Bookkeepers		
	Typist, stenographer, secretary		CE WORKERS
	Mailmen, postal clerks		Barbers, cosmetologists
	Other clerical work		Charwomen, janitors
			-Cooks, domestic
SALES	WORKERS		Firemen, fire protection
	Insurance agents, underwriters		Guards, watchmen
	Real estate agents, brokers		Policemen and sheriffs
	Wholesale sales		Waiters, bartenders, counter workers
	Retail sales clerks	808	Other service workers
	Manufacturing sales		
	Other sales work	LABOR	(except mining)
500	- C. (5. 50105 17011)		Fishermen, oystermen
CRAFT	SMEN, FOREMEN		Longshoremen, stevedores
	Bakers		Lumbermen
	Blacksmiths, forgemen		Labor, other (not elsewhere specified)
603		905	
003	DOUGH HIGKELS	343	I BITTI MOOI



Instruction/Worksheet for the Family Financial Statement



STATE CODES

(Use Code of Your State of Residence)

Aía. Alaska 02 Ariz. 03 Ark. 04 Calif 05 Colo. 06 Conn 07 Del. ΩS Dr 09 Fla 10 Ga 11 Hawau 12 Idaho 13 111 14 Ind 15 lowa Kans 17 Ky. 16 La. 19 Maine Md. 21 Mass Mich. 23 Minn. 24 Miss. 25 Mo. 26 Mont. 27 Nebr. 28 Nev. 29 N. H. 30 N.J. 31 N. M. 32 N.Y. 33 N. C 34 N. D. 35 Ohio 36 Okla 37 Oregon 38 Pa. 39 R. L 40 S. C. S. D. 42 Tenn. Tex. 44 Utah Vt. ۷a. 47 Wash. 48 W. va. 49 Wis. 50 Wyo. 51 Canada 53

GENERAL - TO THE FINANCIAL AID APPLICANT:

- 1. Complete all four pages of this worksheet. Read and follow the instructions as you proceed.
- 2. Then transfer the information you have placed on pages one, two and three of this worksheet to the appropriate sections of the enclosed Family Financial Statement. Instructions for transferring the information are contained on page three (Block Z) of this worksheet. Use soft lead pencil.
- 3. Mail this completed worksheet to your first choice institution. Additional copies of page 4 are available from your high school counselor to be mailed to your additional choice schools.
- ial

A		APPLICANT'S NAM (Lest Name First)			home city	. Begin	in the fi	irst bo:	cofea	ch bi	ock and le	first), home a ave empty boa address and t	xes betw
					parts of yo	our home	city (i	appro	priate).	.5 01 7061	accioss and i	JOI WOO!
В		APPLICANT'	S HOME ADDRES			D STREE	T			7			
C		CANT'S HOME CITY	 		ZIP CODE lere you now	E	G	APPLICA DATE DIRT	OF	H		APPLICANT'S ICIAL SECURITY NUMBER	
		-1-1-1-1-1	┸┶┚╬	ODE	celve mell)	APPLI- CANT'S BEX	MONTH	DAY	YEAR	7,			·
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APPLICANT'S PARENTS

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OTHER

CUPATION OF THE MAIL FAMILY EARNER:

() WAGES OR SALARY

O BUSINESS OWNER

O FARM OWNER

OTHER

(MARK ONLY ONE ANSWER)

Reporting Income - Blocks W AND X

GENERAL

List here adjusted gross income on federal tax form, tederal income tax, exemption and other income information for the MOST RECENT YEAR FOR WHICH A FEDERAL TAX RETURN WAS FILED plus additional information requested. The word "PARENTS" means the persons upon whom the applicant is financially dependent; for example, father, stepfather, male guardian; mother, stepmother, or female guardian. Parents' income information should be included if the applicant wishes to qualify for federal financial aid programs. The applicant's parents should place their income information in the unshaded column; the shaded column is for applicant and (if he is married) spouse income information. For each column enter responses to all questions following these instructions:

	ers for the following questions, place one number in each small box. The numbers should end in xes. EXAMPLES:	n the last (right-hand) box of
Enter \$320.18 this wa	1320	this way: 1 0 9 7 2
PARENTS' INCOME FEDERAL TAX RETURN LAST FILED FOR TAX YEAR: 1970 1971 NETITURE (SEE INSTRUCTION 5) (IMSTRUCTIONS 1 THROUGH S REFER TO THE YEAR INDICATED ABOVE) WAS THIS A	DO NOT SHOW CENTS	X APPLICANT'S INCOME. THE APPLICANT'S 1971 AND 1972 INCOME MORPOR- MATION SHOULD BE RE- PORTED BELOW: IN (WARD APPLICANT'S O YES HOT TAX PARKETS O NO.
JOINT RETURN? () NO	Instruction 1:	and the state of t
ADJUSTED GROSS INCOME FROM ABOVE TAX YEAR SET - INSTRUCTION ('Adjusted Gross Income' —PARENTS— if the tax year is 1970, copy from line 18 of Federal Form 1040; if tax year is 1971, copy your adjusted gross income from your 1971 federal tax form. If you did not file jointly, you should add your adjusted gross incomes and fist the sum. If you are separated or divorced, father should list adjusted gross income and, if applicant lives with mother, mother should include her adjusted gross income. APPLICANT—copy your adjusted gross income from your 1971 federal tax form. If you are married and did not file a joint return with your husband or wife, add your adjusted gross income to that of your spouse and list the sum. If 1971 tax form is not yet filed, estimate your 1971 adjusted gross income.	ADJUSTED GROSS HICCORE PRIME 1971 TAL VIEW (SEE INSTRUCTION 1)
FEDERAL INCOME TAKPAID IN ABOVETAX YEAR (SEE 19519-0210-02) CLAIMED	Instruction 2: 'Federal Income Tax Paid'—PARENTS—if tax year is 1970, copy from line 25 of Federal Form 1040; if tax year is 1971, copy your total income tax as calculated on your 1971 federal tax form. APPLICANT should copy the total income tax as calculated on his or her 1971 federal tax form; estimate the amount if the 1971 form has not yet been filed. DO NOT COPY TAX WITHHELD ON W-2 FORM. Married persons not filing joint returns should add their two tax amounts and report the sum. Instruction 3: 'Exemptions Claimed'—PARENTS—if tax year is 1970, copy from line 11 of Federal Form 1040; if tax year is 1971, copy the exemption—claimed on 1971 federal tax form. APPLICANT should copy exemptions claimed (or to be claimed) on 1971 federal tax form. Married persons not filing joint returns should add their two exemption figures and report the sum.	PEDERAL INCOME TAX PAID MI 1971 TAX YEAR (SEE INSTRUCTION 2) CLAIMED
OTHER INCOME RECEIVED IN ABOVE TAX YEAR ASEE NOTHING ON 4	Instruction 4: Other Income Received In Last Tax Year'—for the tax year checked at the top of the column, parents should list all income received that was NOT subject to taxation. Examples of this type of income include any income on which no federal tax form was required, social security, veteran's benefits, sick pay, pensions, dependents' allowance, earnings on non-taxable bonds, value of rent-free housing, etc. All child support payments should be included here, unless father's income is included above in adjusted gross income. Parents should NOT include in this box any income from these sources which the applicant will include in Block X. Instruction 5: IF A TAX RETURN WAS NOT FILED FOR 1970 OR 1971: Parents should list in 'Other Income' box all income received during the last 12 months and proceed to Instruction 6.	DOES THE IMPOSES ABOVE FOR APPLIA CHAT for confidently instantial reliability CLUDG EARMONGS FROM THE COLLEGE WORMSTUDY PRO- GRAMTY O YES O NO
ESTIMATED INCOME FOR: () 1971 () 1972 ((SEE INSTRUCTION 6)	Instruction 6: 'Estimated Income' —PARENTS— if you stated your last tax return was filed for tax year '1970,' list your estimated 1971 total income; if you stated your last tax return was filed for tax year '1971,' list your estimated 1972 total income. Indicate whether the estimate is for 1971 or 1972. APPLICANT—estimate your total income for 1972.	ASSULCATE SETMINES MOSTAL FOR SET TREE INSTRUCTION 0
IF APPLICANTS INCITION WORKED DURING 1971 IN DICATE TOTAL A INCUNT SHE EARNED ISEE INSTRUCTION FI	Instruction 7: If applicant's mother worked during 1971, she should indicate the total amount of her 1971 earnings in the box at the left. If this form is being completed during 1971, she should estimate her total 1971 earnings. Applicant should complete the question at the right, indicating source(s) of income and the total amount, as requested.	SEDECATE OF APPLICANT WILL SECRIVE SEC
OIC.		



Reporting Assets - Block Y GENERAL Report your assets using the following instructions. Please check your calculations carefully. Parents' assets information should be included if applicant wishes to qualify for federal financial aid programs. Instruction 8: PARENTS' SAVINGS AND INVESTMENTS ASSETS INFORMATION Parents' Savings PLUS Market Value of Parents' Stocks/Bonds Equals ISEE INSTRUCTION 8 MINUS Debts against Stocks and Bonds (-) Equals PARENTS' SAVINGS AND INVESTMENTS Instruction 9: MARKET VALUE OF PARENTS' HOME (do not give value here if it will be included in farm or husiness) MARKET VALUE OF PARENTS HOME ISEE INSTRUCTION 9 The approximate resale value of the parents' home should be listed for this item. If parents rent, this should be listed as zeros. Instruction 10: NET VALUE OF PARENTS' FARM OR BUSINESS (do not include value of home if it was listed under MARKET VALUE OF PARENTS' HOME) Current Market Value of Farm or Business (including farmhouse(s), building(s), machinery, animals, etc.) MINUS Outstanding Debts of Farm or Business Equals Value of Farm or Business **MULTIPLY** above amount by Your share of ownership (%) of Farm ISEE INSTRUCTION 10 or Business (100% equals 1.00) % Equals NET VALUE OF FARM OR BUSINESS Instruction 11: MORTGAGE ON PARENTS' HOME MORTGAGE ON PARENTS' HOME The outstanding mortgage against the market value of the parents' home (shown in Instruction 9) should be listed here. Instruction 12: PARENTS' OTHER ASSETS Value of Trusts PLUS Market Value of Other Real Estate not listed before (e.g., lots, apartments, second home, etc.) $(+) s_{--}$ **Equals Other Assets** MINUS Outstanding Mortgage on Other Real Estate (do not include business, farm, or home mort-ISEE INSTRUCTION 121 gage) Equals PARENTS' OTHER ASSETS Instruction 13: **APPLICANT'S ASSETS** (Include only those assets that are in the applicant's name. If applicant is married, include assets of applicant's husband or wife.) Savings of Applicant PLUS Market Value of Stocks and (+) s Bonds in Applicant's Name PLUS Value of Trusts in (+) \$ Applicant's Name

(=) **S**_

Equals

MINUS Outstanding Debts Other

PPLICANT'S ASSETS

than Auto, Home Mortgage, or Debts

Now, using the following instructions, transfer to the enclosed Family Financial Statement the information you have completed thus far.

Your Family Financial Statement will be processed by an electronic device which will record the information that you indicate by blackening (gridding) circles and squares in the grid areas. Complete the form carefully. USE A SOFT LEAD PENCIL. DO NOT USE INK OR BALL POINT PEN. In each block, clearly print the appropriate information in the boxes above the grid area. Then below each box, blacken completely the circle with the corresponding letter or number. If you are leaving any box blank, grid the small space square solve the grid area; you should merely grid the proper response. Make your marks heavy and black, Avoid stray marks and smudges. See the sample in Figure 1.

Grid zeros to indicate "none" to any item. To indicate that any item does not apply, grid all the space squares for that item. You should respond to every question on the form to ensure a complete and accurate analysis.

Then complete the Signature section of the Family Financial Statement, enclose the fee and it is ready for mailing to ACT.

One report is sent to each code you listed in BLOCK N.

Make check payable to the American College Testing Pro-

Ofam

We certify that to the best of our Prowledge the information contained in this statement is correct and complete. We suthorize The American College Yesting Program to transmit the information to the college(s), school(s), or agency (ies) indicated and agree that they have our permission to verify it. We also agree to release copies of our U.S. or State Income Tax Returns, upon request to The American College Testing Program, or to the college(s), school(s), or agency (ies) coded herein.

Father or Male G	Guardian	Social Security No.
wother or Femal	le Guardian	Social Security No.
Applicant	Appl	icant's Husband or Wife
	Date signed:	IO. DAY YR.

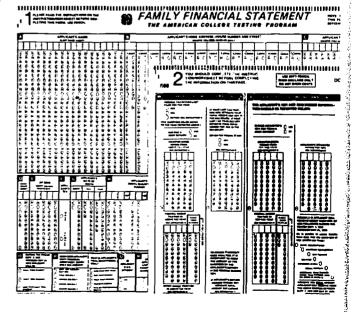


FIGURE 1

ISEE INSTRUCTION 131

APPENDIX C

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I. STUDENT AND FAMILY DEMOGRAPHIC DATA

TABLE 1-1
Marital Status

	n	Percen
Single	2,274	95
Married (spouse not a student)	47	2
Married (spouse a student)	12	1
Missing data	51	2
Totals	2,384	100

TABLE I-2

Current Occupation of Respondent*

Occupation	n	Percent	
Unemployed	55	2	
Professional/technical	27	1	
Managers, officials, proprietors	. 1	.05	
Farming	1	.05	
Clericat	122	5	
Sales workers	46	2	
Craftsmen, foremen	17	1	
Operatives	14	1	
Service workers	74	3	
Labor (except mining)	30	1	
Currently enrolled in college	1,997	84	
Totals	2,384	101**	

^{*}Question 19B, Appendix A.

TABLE 1-3

Current College Attendance

Attendance	n	Percent
Full time	2,276	96
Part time	24	1
Not enrolled	56	2
Missing data	28	1
Totals	2,384	100

TABLE 1-4
Where Do You Live While Attending College?

Living Quarters	n	Percent
Parents or relatives	621	26
Nonuniversity housing (not with		
parents or relatives)	218	9
In residence hall, fraternity, or sorority	1,410	59
Other university housing	71	3
Missing data	64	3
Totals	2,384	100

TABLE 1-5
Applicant's Year in School as of the Fall of 1972

Educational Level	n	Percent	
Sophomore	2,157	91	
Junior	183	8	
Senior	14	1	
Postgraduate:			
1 year	6	0	
2 years	3	0	
3 years	4	0	
4 years	1	0	
Other	16	1	
Missing data	0	0	
Totals	2,384	100	

TABLE I-6

Dates of Completion of ACT Assessment

Test Period	n	Percent	
Sept. 1969-Sept. 1970	239	10	
Sept. 1970-Sept. 1971	2,078	87	
Sept. 1971-Sept. 1972	67	3	
Missing data	0	. 0	
Totals	2,384	100	



[&]quot;Due to rounding error.

TABLE 1-7

ACT Scores of Respondents

n	%	_							
	-	n	%	n	%	n	%	n	%
429	18	563	24	537	23	428	18	413	 17
812	34	532	22	410	17	611	26	590	25
944	40	495	21	825	35	459	19	820	34
199	8	794	33	612	26	886	38	561	_24
2,384	100	2,384	100	2,384	101`	2,384	101'	2,384	100
	812 944 199	812 34 944 40 199 8	812 34 532 944 40 495 199 8 794	812 34 532 22 944 40 495 21 199 8 794 33	812 34 532 22 410 944 40 495 21 825 199 8 794 33 612	812 34 532 22 410 17 944 40 495 21 825 35 199 8 794 33 612 26	812 34 532 22 410 17 611 944 40 495 21 825 35 459 199 8 794 33 612 26 886	812 34 532 22 410 17 611 26 944 40 495 21 825 35 459 19 199 8 794 33 612 26 886 38	812 34 532 22 410 17 611 26 590 944 40 495 21 825 35 459 19 820 199 8 794 33 612 26 886 38 561

^{*}Due to rounding error.

TABLE 1-8

On a 4.0 Grade System, What Is Your Approximate Cumulative Grade Point Average at the Present Time?

Cumulative Grade Point	n	Percent	
0.1-0.9	1	0	
1.0-1.5	27	1	
1.6-2.0	209	9	
2.1-2.5	430	18	
2.6-3.0	743	31	
3.1-3.5	549	23	
3.6-4.0	355	15	
Missing data	70	3	
Totals	2,384	100	

TABLE I-9
What Type of College Did Your Parents Attend?

College Type	F	Mother		
	n	Pērcent	n	Percent
None	1,535	64	1,567	66
Private	169	7	206	9
Public	541	23	516	22
Don't know	63	3	34	1
Missing data	76	3	61	2
Totals	2,384	100	2,384	100



TABLE I-10

Since Your Parents First Left School to Begin Work,
What Statements below Best Describe the Amount of
Additional Education Each Has Had?*

Response	Both Parents		Father Only		Mother Only		Neither Parent		Total	
	'n	%	n	%	n	%	n	%	n	%
No structured addressional experience Attended business or trade conferences.	651	27	184	8	603	25	946	40	2,384	100
and/or military training Received formal training provided by	127	5	668	28	87	4	1,502	64	2,384	101°
employer	161	7 .	371	16 -	211	9	1,641	- 69	2,384	101
Enrolled in adult education courses Enrolled in college courses but did not	131	6	169	7	220	9	1,864	79	2,384	101*
receive degree	54	2	162	7	199	8	1,969	83	2,384	100
Returned to school for additional degree	18	1	93	4	82	3	2,191	92	2,384	100

^{*}Question 30, Appendix A.

TABLE I-11
What Is Your Father's Occupation?

Occupation	л	Percent
Retired/no earned income	167	7
Professional/technical	348	15
Managers, officials, proprietors	218	9
Farming	275	12
Clerical	88	4
Sales workers	143	6
Craftsmen, foremen	446	19
Operatives	207	9
Service workers	119	5
Labor (except mining)	220	9
Missing data	153	6
Totals	2,384	101*

^{*}Due to rounding error.



[&]quot;Due to rounding error.

II. ASPIRATIONS, PLANS, AND EXPECTATIONS

TABLE II-1
What Is the Highest Academic Degree
That You Intend to Obtain?

That You Intend to Obtain? (bef Yo ective n Percent Income Levels

Degree Objective	n	Percent
	· -	
None	22	1
Associate (or equivalent)	132	6
BA (or BS)	971	41
MA (or MS)	765	32
PhD, EdD	209	9
MD, DDS, DVM	104	4
JD (LLB)	74	3
BD	7	0
Other	40	2
Missing data	60	2
Totals	2,384	100

TABLE II-3

What is the Amount of Annual Income (before Taxes) You Expect to Earn When You Complete Your Formal Schooling?

Income Levels	n	Percen
0	35	1
1-3,999	201	8
4,000-7,999	767	32
8,000-11,999	897	38
12,000-19,999	285	12
20,000-29,999	79	3
30,000-39,999	13	1
40,000-54,999	8	0
55,000-69,999	2	0
70,000 and over	3	0
Missing data	94	4
Totals	2,384	99*

^{*}Due to rounding error.

If You Dropped Out of School Today, What Type of Occupation or Job Would You Most Likely Be Working In?

Occupation	n	Percen
Retired/no earned income	57	2
Professional/technical	220	9
Managers, officials, proprietors	30	1
Farming	24	1
Clerical	674	28
Sales workers	335	14
Craftsmen, foremen	152	6
Operatives	108	5
Service workers	370	16
Labor (except mining)	240	10
Missing data	174	7
Totals	2,384	99*

^{*}Due to rounding error.

TABLE II-4
What is the Amount of Annual Income (before Taxes)
You Expect to Earn 25 Years from Now?

Anticipated Income Levels	n	Percen
0	37	2
1-3,999	146	6
4,000-7,999	191	8
8,000-11,999	574	24
12.000-19.999	. 682	28
20,000-29,999	421	17
30,000-39,999	115	5
40,000-54,999	92	4
55,000-69,999	13	1
70,000 and over	37	2
Missing data	76	3
Totals	2,384	100



TABLE II-S

How Certain Are You That 25 Years from
Now You Will Be Earning the Amount
of Income You Estimated You Will Be Earning?

Response	(Degree of Certainty)	n	Percent
Very certain	(probability above .75)	181	7
Reasonably	certain (.50 to .75)	994	42
Somewhat u	ncertain (.25 to .50)	695	29
Very uncerta	in (0 to .25)	441	19
Missing data		73	3
Totals		2,384	100

TABLE II-6

What Statement below Best Characterizes Your Opinion about the General Wage Level over the Next 25 Years in the Occupation You Intend to Pursue?

(Exclude the Effects of Expected Promotions)

Increase in Wages	n	Percent
Average wage level increase at same		
rate as inflation	1,221	51
Faster than inflation	364	15
Slower than inflation	734	31
Missing data	65	3
Totals	2,384	100

TABLE II ~

Indicate the Most Important fluence Affecting
Your Choice of a College (Ex Ante)*

	n	Percent
Advice of parents	81	3
Advice of H.S. teachers	44	2
Info from H.S. counselor	136	6
Talk with admissions officer	78	3
Campus visit	148	6
Scholarship/aid offer	265	11
Good faculty	66	3
High scholastic standards	153	6
Social climate	87	4
Size of college	71	3
Location	215	9
Special curriculum	503	21
Low cost	123	5
Good athletic program	34	1
Coed college	5	0
Desirable intellectual atmosphere	61	3
Missing data	314	13
Totals	2,384	99.,

^{*}Responses are from the SPS, which was filled out in most cases before final choices were made.



[&]quot;Due to rounding error.

TABLE II-8

How Important to You Is Each of the 5 Following Reasons for Continuing Your Education?*

Response	Ve Impo	•	Somewhat Important		Not Very Important		Not Important		Missing Data		Total	
	n	%	n	%	n	%	n	%	n	%	n	⁰ / ₀
To get a better job that earns												
higher income	989	42	1,040	44	231	9	72	3	52	2	2,384	100
To enjoy greater personal											•	
satisfaction	1,762	74	501	21	56	2	10	0	55 、	2	2,384	99**
To serve society	991	42	1,003	42	274	12	56	2	60	2	2,384	100
To serve the next generation by more competently rearing												
children	981	41	837	35	371	16	134	6	61	2	2,384	100
The guidance and advice of my												
parents	506	21	961	40	555	23	308	13	54	2	2,384	99**

^{*}Question 5, Appendix A.

TABLE II-9

How Important to You is Each of the Following Potential Benefits from Your College Education?*

,	Very Important			Somewhat Important		Not Very Important		Not Important		M/ssing Data		Total	
Response	n	¢/o	n	%	n	%	n	%	n	%	n	%	
Meeting and conversing with								-	_			_	
interesting people	1,150	48	962	40	186	. 8	23	1	63	3	2,384	100	
Finding a husband (wife) with													
good financial prospects	144	6	588	25	784	33	812	34	56	2	2,384	100	
Locating a suitable career	1,807	76	450	19	49	2	21	1	57	2	2,384	100	
Providing volunteer civic and													
intellectual leadership	495	21	1,220	51	518	22	91	4	60	2	2,384	100	
Nonmonetary job satisfaction	837	35	952	40	405	17	80	3	110	5	2,384	100	
Finding a husband (wife) with 🕟													
college-developed values	305	13	731	31	664	28	624	26	60	2	2,384	100	
Earning a good income in your													
chosen career	1,079	45	956	40	238	10	51	2	60	2	2,384	99	
A continuing interest in						_				_			
reading and new ideas	1,211	51	883	37	197	8	25	1	68	3	2,384	100	
Guiding and educating your			22.5			_					2 2 2 4	00	
own children	1,413	59	683	29	175	7	56	2	57	2	2,384	99	
Becoming more broad-minded,													
concerned about others,	1 700	70	500	00	61		40		E 7	0	0.204	101	
more tolerant	1,730	73	523	22	61	3	13	t	57	2	2,384	101	

Ouestion 6, Appendix A. to rounding error.

28

[&]quot;Due to rounding error.

III. COLLEGE INSTITUTIONAL DATA

TABLE III-1

Type of College Chosen, by Family Income Quartile

TABLE III-2
State in Which College Is Located

	Family Income Quartile ^a			Total	
Type of Institution	Under \$5,162	\$5,162- 8,587	\$8,588- 12,254	\$12,255 and Up	of Row Percent- ages
MALE					
Public University	20.7	21.8	26.1	31.4	100
Public 4 Year	27.0	27.5	25.1	20.3	99.9 ^C
Public 2 Year	28.5	25.6	28.5	17.4	100
Private University	b	b	b	64.3	_
Private 4 Year	19.0	25.0	29.7	26.3	100
Private 2 Year	38.5	30.8	b	b	
FEMALE					
Public University	24.5	22.5	26.4	26.6	100
Public 4 Year	30.3	27.5	22.8	19.4	100
Public 2 Year	31.9	27.8	18.6	21.7	100
Private University	11.8	8.2	28.2	51.8	100
Private 4 Year	24.3	23.3	24.0	28.3	99.9 ^C
Private 2 Year	b	20.9	46.5	18.6	_

^aAdjusted gross income as defined by income tax laws.

	n	Percent
Alabama	35	1
Arizona	150	6
Arkansas	24	1
California	48	2
Colorado	220	9
D.C.	1	0
Florida	6	0
Hawaii	2	0
Idaho	12	1
Illinois	88	4
Indiana	2	0
lowa	11	1
Kansas	272	11
Kentucky	8	0
Louisiana	16	1
Maryland .	3	0
Michigan	53	2
Minnesota	53	2
Mississippi	91	4
Missouri	89	4
Montana	3	0
Nebraska	55	2
Nevada	9	0
New Jersey	1	0
New Mexico	69	3
New York	35	2
North Carolina	5	0
North Dakota	78	3
Ohio	98	4
Oklahoma	51	2
Pennsylvania	21	1
South Carolina	1	0
South Dakota	142	6
Tennessee	148	6
Texas	158	7
Utah	48	2
Vermont	11	1
Virginia	1	0
West Virginia	18	1
Wisconsin	105	4
Wyoming	4	. 0
Missing data	139	6
Totals	. 2,384	99,

^{*}Due to rounding error.



^bSmall number of observations in these cells.

^CBecause of rounding.

TABLE III-3
Is Your College on a Semester, Quarter, or Trimester System?

Type of System	n	Percent
Semester	1,702	71
Quarter	529	22
Trimester	94	4
Missing data	59	3
Totals	2,384	100

TABLE III-5
Selectivity Index of School
Chosen by Student

Selectivity Index	n	Percent
0	344	14
1-89 on NMSQT1	250 ·	11
89-96 on NMSQT	414	17
97-104 on NMSQT	795	33
105-112 on NMSQT	339	14
113-120 on NMSQT	49	2
121-128 on NMSQT	40	2
128 and over	8	0
Missing data	145	6
Totals	2,384	99

^{*}NMSQT ≈ National Merit Scholarship Qualifying Test.

TABLE III-4

Total Full-Time Enrollment

School Enrollment Level of Student	n	Percen
1-2,999	954	40
3.000-5,999	430	18
6,000-7,499	178	8
7,500-8,999	40	2
9,000-11,999	337	14
12,000-14,999	73	3
15,000-19,999	171	7
20,000-34,999	56	2
35,000 and over	;	0
Missing data	144	6
Totals	2,384	100
_		

TABLE III-6

Percentage of PhDs on Staff at School
Attended by Respondents

· n	Percent
354	15
145	6
515	22
348	15
519	22
214	9
137	5
18	1
134	5
2,384	100
	354 145 515 348 519 214 137 18



[&]quot;Due to rounding error.

IV. STUDENT EXPENDITURES AT COLLEGE

TABLE IV-1
Student-Reported Tuilion (before Aid)

Tuition (before aid) ١١ **Percent** 0 39 1 1-199 7 158 200-399 656 27 400-599 614 26 600-999 372 16 1,000-1,499 281 12 1,500-1,999 5 114 2,000-2,749 47 2 2,750 and over 17 1 Missing data 90 4 ĭ'otals 101° 2,384

TABLE IV-3

Room and Board Expenditures

	Room		Board	
Expenditure	n	Percent	n	Percent
0 (Commuters)	580	24	251	10
1-149	32	1	167	7
150-299	162	7	213	9
300-374	385	16	145	6
375-449	153	6	198	8
450-599	201	8	416	17
600-749	107	4	290	12
750-999	89	4	323	13
1,000-1,749	83	3	239	10
1.750 and over	11	1	28	1
Missing data	581	24	114	5
Totals	2,384	98*	2,384	98*

^{*}Due to rounding error.

TABLE IV-2

Tuition as Given by Institution's Records

Tuition (before aid)	In-State Tuition Only		
	n	Percent	
0	15	1	
1-149	74	3	
150-299	225	9	
300-374	321	13	
375-449	280	12	
450-599	699	29	
600-749	116	5	
750-999	202	8	
1,000-1,749	265	11	
1,750 and over	46	2	
Missing data	141	6	
Totals	2,384	99•	

^{*}Due to rounding error.

TABLE IV-4

Medical, Dental Expenditures

Expenditures	n	Percent
0	693	29
1-149	242	10
150-299	387	16
300-374	167	7
375-449	77	3
450-599	249	10
600-749	115	5
750-999	107	4
1,000-1,749	137	6
1,750 and o ∮ er	77	3
Missing data	133	6
Totals	2,384	99.

^{*}Due to rounding error.



^{*}Due to rounding error.

TABLE IV-5
Expenditures on Durable Goods

Expenditures	n	Percent
0	1,298	54
1-149	432	18
150-299	196	8
300-374	61	3
375-449	49	2
450-599	27	1
600-749	37	2
75C-999	23	1
1,000-1,749	34	11
1,750 and over	40	2
Missing data	187	. 8
Totals	2,384	100

TABLE IV-6
Total Budget Excluding Tuition

Expenditures	n	Percen
0-599	37	2
600-999	135	6
1,000-1,499	757	32
1,500-1.999	1,098	46
2.000-2,749	148	6
2.750-3.499	25	1
3,500 and over	39	2
Missing data	145	6
Totals	2,384	101*

^{*}Due to rounding error.



V. SOURCES OF FUNDS

TABLE V-1
Parents' Actual Contribution

Parents' Contribution Percent 589 25 0 1-149 229 10 150-299 259 11 300-374 122 5 118 5 375-449 450-599 108 5 600-749 149 6 164 7 750-999 1,000-1,749 316 13 228 10 1,750 and over Missing data 102 4 2,384 1011 Totals

TABLE V-2
Scholarship/Grant

Amount of		
Scholarship/Grant	n	Percent -
0	729	31
1-149	79	3
150-299	192	8
300-374	163	7
375-449	120	5
450-599	247	10
600-749	192	8
750-999	201	8
1,000-1,749	279	12
1,750 and over	74	3
Missing data	108	5
Totals	2,384	100

TABLE V-3
Student Loan

Amount of Loan	'n	Percen
0	950	40
1-149	17	1
150-299	70	3
300-374	82	3
375-449	97	4
450-599	189	8
600-749	251	10
750-999	208	9
1.000-1,749	302	13
1,750 and over	107	4
Missing data	111	5
Totals	2,384	100

TABLE V-4
Student Income from Job

Job Income	מ	Percen
0	1,056	44
1-199	122	5
200-399	195	8
400-599	240	10
600-999	374	16
1,000-1,499	134	6
1,500-1,999	61	3
2,000-2,749	36	1
2,750 and over	13	1
Missing data	153	6
Totals	2,384	100

TABLE V-5
Other New Debt Incurred

n	Percent
2,026	
34	1
25	1
17	1
27	1
40	2
215	9
2,384	100
	2,384



^{*}Due to rounding error.

VI. FAMILY INCOME AND ASSETS

TABLE VI-1

Parents' Net Financial Assets*

Savings and Investment	n	Percent
0	729	31
1-2,999	762	32
3,000-5,999	174	7
6,000-7,499	50	2
7,500-8,999	16	1
9,000-11,999	41	2
12.000-14.999	21	1
15,000-19,999	34	1
20,000-34,999	28	1
35,000 and over	14	1
Missing data	515	22
Totals	2,384	101**

^{*}Question 8, Appendix B.

TABLE VI-2

Net Value of Parents' Farm or Business*

Net Value Farm/Business	n	Percent
0	847	36
1-3,999	102	4
4,000-7,999	73	3
8,000-11,999	59	3
12,000-19,999	81	3
20,000-29,999	95	4
30,000-39,999	58	2
40,000-54,999	59	3
55,000-69,999	26	1
75,000 and over	26	1
Missing data	958	40
Totals	2,384	100

^{*}Question 10, Appendix B.

TABLE VI-3

Parents' Other Assets*

Value of Other Assets	n	Percen
0	1145	48
1-2,999	94	4
3,000-5,999	61	3
6,000-7,499	21	. 1
7,500-8,999	11	1
9,000-11,999	22	1
12,000 and over	34	1
Missing data	996	42
Totals	2,384	101**

^{&#}x27;Question 12, Appendix B.

TABLE VI-4

Gross Market Value of Parents' Home*

Home Value	n	Percent
0	336	14
1-2,999	62	3
3,000-5,999	142	6
6,000-7,499	91	4
7,500-8,999	100	4
9,000-11,999	215	9
12,000-14,999	204	9
15,000-19,999	372	16
20,000-34,999	347	14
35,000 and over	46	2
Missing data	469	20
Totals	2,384	100

^{&#}x27;Question 9, Appendix B.



[&]quot;Due to rounding error.

[&]quot;Due to rounding error.

[&]quot;Due to rounding error.

TABLE VI-5

Mortgage on Parents' Home*

Value of Mariana	п	Percent
Value of Mortgage		
0	643	27
1-2,999	181	8
3,000-5,999	202	8
6,000-7,499	115	5
7,500-8,999	95	4
9,000-11,999	169	7
12,000-14,999	130	5
15,000-19,999	. 124	5
20,000-34,999	74	3
35,000 and over	18	1
Missing data	633	27
Totals	2,384	100

^{*}Question 11, Appendix B.

TABLE VI-6

Students' Assets*

Value of Applicants' Assets	п	Percent
0	839	35
1-199	296	12
200-399	201	8
400-599	120	5
600-999	80	3
1,000-1,499	48	2
1,500-1,999	22	1
2.000-2.749	18	1
2.750 and over	21	1
Missing data	739	31
Totals	2,384	99.,

^{&#}x27;Question 13, Appendix B.



[&]quot;Due to rounding error.

VII. FAMILY MEDICAL INFORMATION

TABLE VII-1
Family Member Visits to Doctor/
Hospital Stay in Last Year

Response	n	Percent
Yes	1,899	80
No	453	19
Missing data	32	1
Totals	2,384	100

TABLE VII-2

Applicant Days in Hospital Last Year

n	Percent
1.292	54
96	4
77	3
49	2
870	37
2,384	100
	1.292 96 77 49 870

TABLE V.. 3

Total Parents, Brothers, Sisters
Days in Hospital Last Year

n	Percent	
831	35	
156	6	
241	10	
113	5	
119	5	
75	3	
57	. 2	
25	1	
12	1	
25	1	
730	31	
2,384	100	
	831 156 241 113 119 75 57 25 12 25 730	

TABLE VII-4

Total Visits to Doctor by Applicant Last Year

Visits	n	Percent
0	212	 9
1-2.9	762	32
3.0-5.9	527	22
6.0-7.4	99	4
7.5-8.9	33	1
9.0-11.9	60	3
12.0-14.9	18	1
15.0-19.9	18	1
20.0 and over	29	1
Missing data	626	26
T∩tals	2,384	100

TABLE VII-5

Total Visits to Doctor by Parents,
Brothers, and Sisters Last Year

Visits	n	Percent
0	92	4
1-2.9	187	8
3.0-5.9	417	18
6.0-7.4	175	7
7.5-8.9	87	4
9.0-11.9	266	11
12.0-14.9	105	4
15.0-19.9	147	6
20.0-34.9	226	10
35.0 and over	107	5
Missing data	575	24
Totals	2,384	101*

^{*}Due to rounding error.



TABLE VII-6

Expenditures on Surgery for Parents,
Brothers, and Sisters

n	Percent
1,958	82
373	16
35	1
18	1
2,384	100
	1,958 373 35 18

TABLE VII-7

Expenditures on Special Drugs/Medical Equipment for Parents, Brothers, and Sisters

Expenditures	n	Percent
0 (or Missing)	1,060	45
1-149	775	32
150-299	280	12
300-374	84	3
375-449	37	2
450-599	51	2
600-749	19	1
750-999	14	1
1.000-1.749	34	1
1,750 and over	30	1
Totals	2,384	100



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